

WHAT IS CLAIMED IS:

1. A remote access system for accessing a predetermined resource from a remote place, comprising:

5 an access target unit to be accessed;

an accessing unit for accessing the access target unit; and

a connection unit for standing proxy for the access target unit to the accessing unit, wherein the accessing unit comprises:

10 storage means for storing a certificate in which access privilege with regard to the resource is described; and

presenting means for presenting the certificate stored in the storage means to the access target unit having the resource,

the connection unit comprises:

15 verification means for verifying the certificate received from the accessing unit; and

transmission means for transmitting the certificate verified by the verification means to the access target unit specified by the accessing unit, and

20 the access target unit comprises determination means for determining according to the certificate transmitted by the connection unit whether to permit the accessing unit to access the resource.

2. A remote access system according to Claim 1, wherein the connection unit connects a network which includes the access target unit and another network to each other.

25 3. A remote access system according to Claim 1, wherein the certificate includes proxy information which indicates that the connection unit stands proxy for the access target unit.

4. A remote access system according to Claim 1,  
further comprising an authority for issuing an issue permission certificate serving  
as a certificate for giving permission to issue to the accessing unit, the certificate in which  
access privilege with regard to the resource is described,

5 wherein the connection unit issues the issue permission certificate issued by the  
authority, to the accessing unit.

5. A remote access system according to Claim 4, wherein the certificate in  
which access privilege with regard to the resource is described includes information  
10 indicating that permission to issue to the accessing unit the certificate in which access  
privilege with regard to the resource is described is given, as role information indicating a  
role assigned to the connection unit.

6. A remote access system according to Claim 1, further comprising a  
15 certificate authority for issuing a public-key certificate based on a public-key  
cryptosystem, to each entity constituting the remote access system.

7. A remote access method for accessing a predetermined resource from a  
remote place, comprising:

20 a storage step of storing a certificate in which access privilege with regard to the  
resource is described;

a presenting step of presenting the certificate stored in the storage step to an access  
target unit having the resource;

25 a verification step of verifying the certificate received from an accessing unit for  
accessing the access target unit;

a transmission step of transmitting the certificate verified in the verification step to  
the access target unit specified by the accessing unit; and

a determination step of determining whether to permit the accessing unit to access the resource, according to the certificate transmitted by a connection unit for standing proxy for the access target unit to the accessing unit.

5           8.     A remote access method according to Claim 7, wherein a network which includes the access target unit and another network are connected to each other.

          9.     A remote access method according to Claim 7, wherein the certificate includes proxy information which indicates that the connection unit stands proxy for the  
10   access target unit.

          10.    A remote access method according to Claim 7, further comprising a step of issuing an issue permission certificate serving as a certificate for giving permission to issue to the accessing unit, the certificate in which access privilege with regard to the  
15   resource is described,

              wherein the issue permission certificate issued by the authority is issued to the accessing unit.

          11.    A remote access method according to Claim 10, wherein the certificate in  
20   which access privilege with regard to the resource is described includes information indicating that permission to issue to the accessing unit the certificate in which access privilege with regard to the resource is described is given, as role information indicating a role assigned to the connection unit.

25           12.    A remote access method according to Claim 7, further comprising a step of issuing a public-key certificate based on a public-key cryptosystem, to each entity constituting the remote access method.

13. A remote access program executable by a computer, for accessing a predetermined resource from a remote place, the program comprising:

a storage step of storing a certificate in which access privilege with regard to the resource is described;

5 a presenting step of presenting the certificate stored in the storage step to an access target unit having the resource;

a verification step of verifying the certificate received from an accessing unit for accessing the access target unit;

10 a transmission step of transmitting the certificate verified in the verification step to the access target unit specified by the accessing unit; and

a determination step of determining whether to permit the accessing unit to access the resource, according to the certificate transmitted by a connection unit for standing proxy for the access target unit to the accessing unit.